Claims

1. A perforating system for perforating a well, the perforating system including a plurality of perforating guns suspended in the well from one of a wireline and coiled tubing, the perforating system further comprising:

a downhole electronic command circuit for firing each of the plurality of guns in response to a command signal, the command circuit controlling the firing of the guns in response to opening a fuse in the command circuit; and

a conductor cable, which may be the wireline, extending from the surface to the downhole command circuit for firing the guns in a selected order.

2. A perforating system as defined in Claim 1, wherein the command signals from the surface to the downhole command circuit is one of a positive DC charge and a negative DC charge.

3. A perforating system as defined in Claim 1, wherein the command circuit is a solid state circuit.

4. A perforating system is defined in Claim 1, wherein the command circuit is supported on an uppermost of the plurality of guns.

5. A perforating system as defined in Claim 1, wherein the command circuit is retrieved to the surface after the guns are fired.

6. A perforating system as defined in Claim 1, wherein a feed-through wire from the command circuit to each gun provides a detonating current to fire the gun, and a control wire controls the state of a switch within the command circuit.

7. A perforating system as defined in Claim 1, wherein opening of the fuse changes a reference voltage in one or more switching elements.

8. A system for selectively activating a plurality of tool suspended in a well, the system comprising:

a downhole electronic command circuit for firing each of the plurality of tools in response to a command signal, the command circuit including a fuse opened in response to the command signal to fire the next of the plurality of tools in a selected order; and

a conductor cable extending from the surface to the downhole command circuit for firing the tools in the selected order.

9. A system as defined in Claim 8, wherein the command circuit is retrieved to the surface after the tools are activated.

10. A system as defined in Claim 8, wherein the command circuit is a solid state circuit.

11. A system as defined in Claim 8, wherein the command signal from the surface to the downhole command circuit is one of a positive DC charge and a negative DC charge.

12. A system as defined in Claim 8, wherein a feed-through wire from the command circuit to each tool provides a detonating current to activate the tool, and a control wire controls the state of a switch within the command circuit.

13. A system as defined in Claim 8, wherein opening of the fuse switches a reference voltage in one or more switching elements.

14. A method of activating a plurality of tools suspended in the well from one of a wireline and coiled tubing, the method comprising:

providing a downhole electronic command circuit to activate each of the plurality of tools in response to a command signal, the command circuit controlling the activation of the tools in response to opening a fuse in the command circuit; and

transmitting the command signal between the surface and the downhole command circuit to activate the tools in a selected order.

15. A method as defined in Claim 14, wherein the command signals between the surface to the downhole command circuit are one of a positive DC charge and a negative DC charge.

16. A method as defined in Claim 14, further comprising:

selectively orienting one or more of the plurality of tools within the well with a swivel.

17. A method as defined in Claim 14, wherein the command circuit is retrieved to the surface after the tools are activated.

18. A method as defined in Claim 14, wherein the command circuit is a solid state circuit.

19. A method as defined in Claim 14, wherein the command signals are non-alternating.

20. A method as defined in Claim 14, wherein the command circuit is positioned in the well on an uppermost of a plurality of tools.